

Diclofenac (Sodium)

Catalog No: tcsc2355



Available Sizes

Size: 5g



Specifications

CAS No:

15307-79-6

Formula:

$C_{14}H_{10}Cl_2NNaO_2$

Pathway:

Immunology/Inflammation

Target:

COX

Purity / Grade:

>98%

Solubility:

H₂O : 10 mg/mL (31.43 mM; ultrasonic and warming and heat to 60°C)

Alternative Names:

GP 45840

Observed Molecular Weight:

318.13

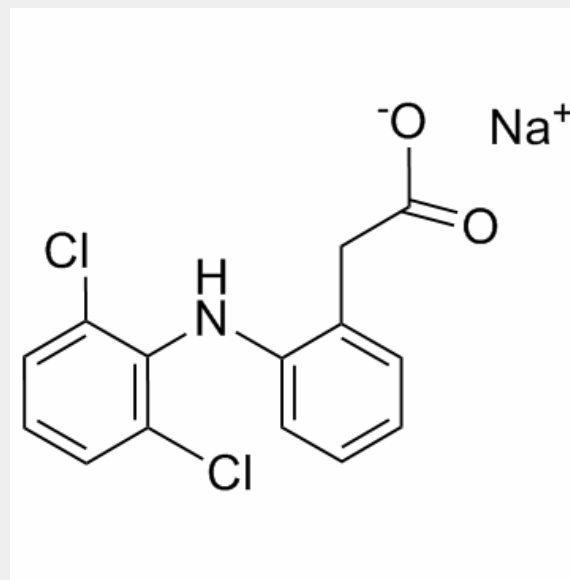
Product Description

Diclofenac Sodium (GP 45840) is a potent and nonselective anti-inflammatory agent, acts as a **COX** inhibitor, with **IC₅₀**s of 4 nM, 1.3 nM for human COX-1 and COX-2 in CHO cells, and 5.1, 0.84 μM for ovine COX-1 and COX-2, respectively.

IC₅₀ & Target: IC₅₀: 4 nM (Human COX-1, in CHO cells), 1.3 nM (Human COX-2, in CHO cells)^[1], 5.1 μM (Ovine COX-1), 0.84 μM (Ovine COX-2)^[2]

In Vitro: Diclofenac Sodium (GP 45840) is a potent COX inhibitor, with IC_{50} s of 4 nM and 1.3 nM for human COX-1 and COX-2 in the CHO cells, respectively. Diclofenac effectively blocks COX-1 mediated prostanoid production from U937 cell microsomes, with an IC_{50} of 7 ± 3 nM^[1]. Diclofenac Sodium exhibits inhibition on COX-1 and COX-2 enzyme with IC_{50} s of 5.1 and 0.84 μ M, respectively^[2].

In Vivo: Diclofenac (3 mg/kg, b.i.d., for 5 days) significantly increases faecal ^{51}Cr excretion in rats, and such effect is also observed in squirrel monkeys after administrated of 1 mg/kg twice daily for 4 days^[1]. Diclofenac (10 mg/kg) shows anti-inflammatory activity in mice^[2]. Diclofenac (10 mg/kg) decreases oxidized low-densitylipoprotein (Ox-LDL), but shows no effects on the kinetics parameters of catalase and glutathione peroxidase via intramuscularly injection into rats^[3].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!